Application No.: 09/893,412 Docket No.: S3632.0002/P002

REMARKS

Claims 1-13 were pending. Claims 1 and 4-13 have been amended. Claims 14-17 have been added. Claims 1-17 are pending.

The Office Action includes a requirement for corrected drawings. Corrected drawings are attached in the form of formal drawing Figs. 1-5.

Claims 8, 10, and 11 stand rejected under 35 U.S.C. § 112 as being indefinite. Claims 8, 10, and 11 have been amended to address the Examiner's concerns, and are submitted as particularly pointing out and distinctly claiming the subject matter of the invention.

Claims 1-5 and 10-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,214,653 to Elliott, Jr. et al. in view of U.S. Pat. No. 6,24,174 to Sirowitzki et al. The rejection of these claims is traversed.

Claim 1 recites a diagnostic system for a printing press operation. The diagnostic system includes data storage means, and a generic database containing problem solving data related to print job appearance stored on the data storage means. A specialized database contains user-specific operations data stored on the data storage means. An interactive data entry interface permits a user to describe an appearance of a print job and access the databases. A processing unit generates and displays possible solutions to print faults found in the appearance of the print job from the databases based on the print job appearance described by the user.

Elliott, Jr. et al. discloses a fault finding system includes a knowledge base containing production rules, and an LRU (lowest replaceable unit) database. The production rules stored in the knowledge base take the form: IF <premise> THEN <conclusion>. The system disclosed by the reference to Elliott, Jr. et al. accepts user

input data that includes statements as to the state of the target system and other data. The reference to Elliott, Jr. et al. does not teach or suggest a diagnostic system for a printing press operation that includes a generic database containing problem solving data *related to print job appearance,* and a specialized database containing user-specific operations data. Significantly, the Elliott, Jr. et al. reference does not teach or suggest an interactive data entry interface that permits a user to describe *an appearance of a print job*. Moreover, the Elliott, Jr. et al. reference does not teach or suggest a processing unit that generates and displays possible *solutions to print faults* found in the appearance of the print job from the databases based on the print job appearance described by the user. Instead, the reference to Elliott, Jr. et al. relates generally to an expert system for determining component failure so that the failed component can be replaced. In contrast, the present invention relates to solving print job appearance problems. To illustrate the distinction, the solutions to the print job appearance problem could include changing processing parameters, for example, and do not necessarily require replacement of a failed component. Indeed, all components could be functioning properly and yet problems in print job appearances could be present. Elliott, Jr. et al. does not anticipate or render obvious the present invention as recited in claim 1.

Sirowitzki et al. does not cure the deficiencies of Elliott, Jr. et al. The reference to Sirowitzki et al. discloses an automated maintenance system for a printing press. Sirowitzki et al. does not combine with the reference to Elliott, Jr. et al. to teach or suggest a diagnostic system for a printing press operation that includes a generic database containing problem solving data *related to print job appearance,* a specialized database containing user-specific operations data, and an interactive data entry interface that permits a user to describe an *appearance* of a print job. Moreover, the proposed combination of the Elliot, Jr. et al. and Sirowitzki et al. references does not teach or suggest a processing unit that generates and displays possible solutions to

print faults found in the appearance of the print job. Claim 1 and its dependent claims 2-11 are submitted as patentable over the proposed combination of the cited references to Elliott, Jr. et al. and Sirowitzki et al.

Claim 12 recites a system for diagnosing faults in a printing press operation having a user interface for inputting a problem description of an appearance of a print job problem, and a system level database containing generic knowledge regarding the printing press operation. A diagnostic interface is used for further specifying the problem. A user level database contains specific knowledge regarding the printing press operation. The diagnostic interface includes inputs related to symptoms, classification, or visual matches of the appearance of the print job problem.

Elliott, Jr. et al. discloses a generalized expert system for determining whether an LRU has failed. The reference to Elliott, Jr. et al. does not teach or suggest a system for diagnosing faults in a printing press operation having a user interface for inputting a problem *description* of an *appearance* of a print job problem, and a system level database containing generic knowledge regarding the printing press operation. Further, the Elliott, Jr. et al. reference does not teach or suggest a diagnostic interface used for further specifying the problem that includes inputs related to symptoms, classification, or visual matches of the appearance of the print job problem, or a user level database containing specific knowledge regarding the printing press operation. The reference to Elliott, Jr. et al. does not anticipate or render obvious the present invention as recited in claim 12.

The reference to Sirowitzki et al. does not cure the deficiencies of the Elliott, Jr. et al. reference. The Sirowitzki et al. reference discloses a printing press with an automated maintenance system. The reference to Sirowitzki et al. does not combine with the Elliott, Jr. et al. reference to teach or suggest a system for diagnosing faults in a

printing press operation having a user interface for inputting a problem description of an *appearance* of a print job problem, a system level database containing generic knowledge regarding the printing press operation, and a diagnostic interface used for further specifying the problem that includes inputs related to symptoms, classification, or visual matches of the appearance of the print job problem. Claim 12 is submitted as patentable over the proposed combination of the Elliott, Jr. et al. and Sirowitzki et al. references.

Claim 13 recites a method of diagnosing faults in a printing press operation using an on-line interactive diagnostics system having a user interface and at least one database. The method includes conducting a dynamic diagnostic session with the diagnostics system using the user interface to describe an appearance of a print job, and choosing a solution from a list of potential solutions including changes to process variable values provided from the database based on the diagnostic session.

The reference to Elliott, Jr. et al. discloses a method of determining the status of an LRU in a system. The reference to Elliott, Jr. et al. does not teach or suggest conducting a dynamic diagnostic session with the diagnostics system using the user interface to describe an appearance of a print job, and choosing a solution from a list of potential solutions including changes to process variable values provided from the database based on the diagnostic session. The Elliott, Jr. et al. reference does not anticipate or render obvious the invention recited in claim 13.

The reference to Sirowitzki et al. does not cure the deficiencies of the Elliott, Jr. et al. reference. The Sirowitzki reference discloses an automated maintenance system for a printing press. Combining the references to Elliott, Jr. et al. and Sirowitzki et al. does not teach or suggest conducting a dynamic diagnostic session with a diagnostics system using a user interface to describe an appearance of a print job, and

choosing a solution from a list of potential solutions including changes to process variable values provided from the database based on the diagnostic session. Claim 13 is submitted as patentable over the proposed combination of the references to Elliott, Jr. et al. and Sirowitzki et al.

Claims 6 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Elliott, Jr. et al. in view of Sirowitzki et al., further in view of U.S. Pat. No. 6,608,932 to Rasmussen et al. The rejection of these claims is traversed.

Claims 6 and 9 depend from claim 1, which is submitted as patentable over the reference to Elliott, Jr. et al. in view of the Sirowitzki et al. reference. The reference to Rasmussen et al. does not cure the deficiencies of the proposed combination of the Elliott, Jr. et al. and Sirowitzki et al. references. The reference to Rasmussen et al. discloses an automated self-diagnostic system for analyzing the quality of printed text using a pre-existing digital test pattern made up of analytical characters in outline font. The Rasmussen et al. reference does not combine with the references to Elliott, Jr. et al. and Sirowitzki et al. to provide the missing teachings of a diagnostic system as recited in claim 1 for a printing press operation including a generic database containing problem solving data related to print job appearance, a specialized database containing user-specific operations data, an interactive data entry interface that permits a user to describe an appearance of a print job, and a processing unit that generates and displays possible solutions to print faults found in the appearance of the print job as recited in claim 1. Claims 6 and 9, dependent on claim 1, are submitted to be patentable over the proposed combination of the Elliott, Jr. et al., Sirowitzki et al., and Rasmussen et al. references.

Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Elliott, Jr. et al. in view of Sirowitzki et al., further in view of U.S. Pat. No. 5,515,503 to Shimomura et al. The rejection of this claim is traversed.

Claim 7 depends from claim 1, which is submitted as patentable over the Elliott, Jr. et al. reference in view of the reference to Sirowitzki et al. The reference to Shimomura et al. does not cure the deficiencies of the references to Elliott, Jr. et al. and Sirowitzki et al. The Shimomura et al. reference discloses a system for making self-repair of a fault in a photocopier using a case-based planning system. The Shimomura et al. reference does not combine with the references to Elliott, Jr. et al. and Sirowitzki et al. to provide the missing teachings of a diagnostic system as recited in claim 1 for a printing press operation having a generic database of problem solving data related to print job appearance, a specialized database of user-specific operations data, an interactive data entry interface that permits a user to describe an appearance of a print job, and a processing unit that generates and displays possible solutions to print faults found in the appearance of the print job. Claim 7 is submitted to be patentable over the proposed combination of the references to Elliott, Jr. et al., Sirowitzki et al., and Shimomura et al.

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the reference to Elliott, Jr. et al. in view of the Sirowitzki et al. reference, further in view of U.S. Pat. No. 5,539,869 to Spoto et al. The rejection of this claim is traversed.

Claim 8 depends from claim 1, which is submitted as patentable over the references to Elliott, Jr. et al. and Sirowitzki et al. The Spoto et al. reference has been cited as providing multimedia links, and relates generally to machine tool diagnostics. The reference to Spoto et al. does not combine with the references to Elliott, Jr. et al. and Sirowitzki et al. to provide the missing teachings of a diagnostic system as recited in

claim 1 for a printing press operation having a generic database of problem solving data related to print job appearance, a specialized database of user-specific operations data, an interactive data entry interface that permits a user to describe an appearance of a print job, and a processing unit that generates and displays possible solutions to print faults found in the appearance of the print job. Claim 8 is submitted to be patentable over the proposed combination of Elliott, Jr. et al., Sirowitzki et al., and Spoto et al.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Dated: June 8, 2004

Respectfully submitted,

By _____

Stephen A. Soffen
Registration No.: 31,063
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
2101 L Street NW
Washington, DC 20037-1526
(202) 785-9700
Attorney for Applicant